

Remarks

The Examiner objected to Claim 6 pursuant to 35 U.S.C. §112, 2nd paragraph, and stated that it would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim. Claim 6 has been rewritten to comply with Examiner's objection and is now believed to be in allowable form. In addition, Claims 7, 10 and 11 are now dependent from rewritten Claim 6 and are now believed to be in allowable form.

Applicants submit new claims 23 – 39. Gerber discloses the use of a spinal fluid collection system which is closed to minimize exposure to bodily fluids or needle sticks (see column 2, lines 13 – 16). New independent claims 23, 36 and 39 claim an open-sided spinal fluid collection system comprising at least one open side.

The Examiner stated that the prior art “did not suggest or disclose a spinal fluid collection system having a holder structured and arranged to hold, when the holder is in an upright position, at a second portion of the holder an element selected from the group” (of a needle, a stylet or a needle sleeve). New independent claim 37 claims a spinal fluid collection system having two needle apertures each structured and arranged to hold an element selected from the group selected from a needle, a stylet or a needle sleeve.

Applicants submit that amended claims 6, 7, 10 and 11 have been amended to conform with Examiner's objections and are now in condition for allowance. Further, Applicants respectfully submit that new claims 23 – 39 are distinguishable over Gerber, alone or in combination, and are allowable over the prior art of record. Accordingly, it is respectfully requested that the subject claims, as amended, be considered and allowed.

Applicants hereby declares that any amendments herein that are not specifically made for the purpose of patentability are made for other purposes, such as clarification, and that no

such changes shall be construed as limiting the scope of the claims or the application of the Doctrine of Equivalents.

The Examiner is invited to telephone the undersigned if this would in any way advance the prosecution of this case.

Respectfully submitted,

By 

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

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VERSION OF ALL CLAIMS WITH MARKINGS TO SHOW CHANGES MADE

Claim 6. (Amended) [The spinal fluid collection system according to Claim 5 wherein:]

A spinal fluid collection system for use by a medical professional for collecting, from a spinal tap into a plurality of CSF tubes, multiple samples of cerebrospinal fluid from a patient, comprising, in combination,

- a) a plurality of CSF tubes structured and arranged to receive, seal,
and transport cerebrospinal fluid;
- b) at least one spinal tap assembly structured and arranged to tap into
the patient to obtain a flow of cerebrospinal fluid; and
- c) a holder structured and arranged to stably hold said CSF tubes
when said holder is in an upright position;
- d) wherein said holder comprises a handle structured and arranged to
assist single-hand manipulation of said holder by the medical
professional during the collecting of the cerebrospinal fluid
directly from said spinal tap into said CSF tubes, when held by
said holder, in a continuing manner without the need to grasp any
said CSF tube during the collecting; and
- e) wherein when said holder is structured and arranged to stably hold
when said holder is in an upright position, an element selected
from the group consisting of:
 - a) a spinal needle;
 - b) a spinal needle sleeve;
 - c) a spinal needle stylet;
 - d) a spinal needle sleeve holding a spinal needle;
 - e) a spinal needle sleeve holding a spinal needle and a stylet;
- f) wherein said holder is structured and arranged to stably hold four
of the CSF tubes when said holder is in an upright position;
- g) wherein said holder is structured and arranged to stably hold, when
said holder is in an upright position, at a first portion of said holder
[any such] an element selected from such group;

h) _____ wherein said holder is structured and arranged to stably hold, when said holder is in an upright position, at a second portion of said holder an [any such] element selected from such group.

Claim 7. The spinal fluid collection system according to Claim 6 wherein said holder further comprises:

- a) four first vertical cavities each structured and arranged to support one of the CSF tubes; and
- b) at least two second vertical cavities each structured and arranged to support any such element selected from such group.

Claim 10. The spinal fluid collection system according to Claim 7 wherein:

- a) said first and second vertical cavities are arranged along a horizontal longitudinal row, having a midpoint, of said holder; and
- b) said handle is essentially horizontal and symmetrical with respect to such midpoint.

Claim 11. The spinal fluid collection system according to Claim 10 wherein said handle comprises the furthest longitudinal horizontal extensions of said holder.

Claim 23 (New) An open-sided spinal fluid collection system comprising:

- a) a test tube rack structured and arranged to support a plurality of test tubes;
- b) wherein said test tube rack comprises at least one open side;
- c) wherein said test tube rack further comprises at least one needle aperture structured and arranged to support an element selected from a group comprising:
 - a) a spinal tap needle;
 - b) a stylet; and
 - c) a needle sleeve.

Claim 24 (New) The open-sided spinal fluid collection system of Claim 23 wherein the test tube rack comprises:

- M 102*
- a) a top shelf comprising a plurality of test tube apertures to support test tubes;
 - b) at least one needle aperture to support an element selected from said group; and
 - c) a bottom shelf.

M 102
Claim 25 (New) The open-sided spinal fluid collection system of Claim 24 further comprising two side panels and two open sides.

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Claim 26 (New) The open-sided spinal fluid collection system of Claim 24 wherein the bottom shelf comprises indentations structured and arranged to support test tubes.

Claim 27 (New) The open-sided spinal fluid collection system of Claim 24 further comprising a handle shelf.

M 102
Claim 28 (New) The open-sided spinal fluid collection system of Claim 27 wherein said handle shelf comprises a plurality of test tube apertures to support test tubes and at least one needle aperture to support an element selected from said group.

M 102
Claim 29 (New) The open-sided spinal fluid collection system of Claim 24 further comprising a handle.

Claim 30 (New) The open-sided spinal fluid collection system of Claim 24 further comprising an inside shelf.

M 102
Claim 31 (New) The open-sided spinal fluid collection system of Claim 30 wherein said inside shelf comprises a plurality of test tube apertures to support test tubes and at least one needle holder to support an element selected from said group.

Claim 32 (New) The open-sided spinal fluid collection system of Claim 24 comprising three test tube apertures to support three test tubes.

Substantive

Claim 33 (New) The open-sided spinal fluid collection system of Claim 24 comprising four test tube apertures to support four test tubes.

Claim 34 (New) The open-sided spinal fluid collection system of Claim 24 comprising two needle apertures to support two elements selected from said group.

Substantive
reference

Claim 35 (New) The open-sided spinal fluid collection system of Claim 23 further comprising a spinal needle and at least one CSF tube.

Substantive

Claim 36 (New) A spinal fluid collection system comprising:

- a) a test tube rack structured and arranged to support a plurality of test tubes comprising a top shelf and a bottom shelf;
wherein said test tube rack further comprises two needle apertures;
- b) wherein each needle aperture is structured and arranged to support an
- c) element selected from a group comprising:
 - a) a spinal tap needle;
 - b) a stylet; and
 - c) a needle sleeve.

Substantive

Claim 37 (New) An open-sided spinal fluid collection system comprising:

- a) a test tube rack structured and arranged to support a plurality of test tubes;
- b) wherein said test tube rack comprises at least one open side;
- c) wherein said test tube rack further comprises two needle apertures;
- d) wherein each of the two needle apertures is structured and arranged to support an element selected from a group comprising:

- a) a spinal tap needle;
- b) a stylet; and
- c) a needle sleeve;

- e) wherein the test tube rack further comprises:

- a) a top shelf comprising a plurality of test tube apertures to support test tubes; and two needle apertures to support an element selected from said group,
- b) a bottom shelf comprising indentations structured and arranged to support test tubes; and
- c) a handle.

Claim 38 (New) The open-sided spinal fluid collection system of Claim 37 further comprising a sterilizable container.

Claim 39 (New) A method of using a spinal fluid collection system comprising the steps of:

- a) providing an open-sided spinal fluid collection test tube rack comprising a plurality of test tube holders and two needle holders;
- b) arranging at least three open test tubes in a test tube holder of the test tube rack;
- c) placing a needle sleeve into a first needle holder;
- d) inserting a spinal needle containing a stylet between a patient's vertebrae until a tip of the spinal needle reaches a dural space;
- e) removing the stylet from the needle;
- f) placing the stylet in a second needle holder;
- g) holding said test tube rack containing the at least three open test tubes under a proximal end of the needle to catch CSF;
- h) determining when an open test tube contains a sufficient amount of CSF;
- i) shifting the open-sided spinal fluid collection test tube rack so that CSF drips from the proximal end of the needle into a second open test tube;
- j) determining when the second open test tube contains a sufficient amount of CSF;
- k) shifting the open-sided spinal fluid collection test tube rack so that CSF drips from the proximal end of the needle into a second open test tube;
- l) determining when the second open test tube contains a sufficient amount of CSF;
- m) removing the stylet from the needle holder;
- n) replacing the stylet inside the needle;
- o) removing the needle from the dural space;
- p) placing the spinal needle containing the stylet into the needle holder; and
- q) closing the at least three open test tubes.
- r) replacing the stylet inside the needle;
- s) removing the needle from the dural space;
- t) placing the spinal needle containing the stylet into the needle holder; and
- u) closing the at least three open test tubes.